

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IT 03/00863

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 E01B7/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 E01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 495 160 A (PEDDINGHAUS CARL DAN GMBH) 22 July 1992 (1992-07-22) column 3, line 30 - column 6, line 40; figures 1-3	1-16
A	US 5 390 881 A (BENENOWSKI SEBASTIAN ET AL) 21 February 1995 (1995-02-21) column 2, line 20 - column 4, line 19; figure 2	1-16
A	EP 0 922 807 A (IMPRESA ANGELO MAZZI S N C DI) 16 June 1999 (1999-06-16) paragraph '0012! - paragraph '0032!; figures 1,4,5,7	1-16
A	US 4 105 175 A (DE SPIEGELEER MICHEL R) 8 August 1978 (1978-08-08) column 2, line 38 - column 5, line 12; figures 2,3,6	1-16

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

21 September 2004

Date of mailing of the international search report

01/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Geiger, H

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IT 03/00863

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0495160	A	22-07-1992	DE 4041264 A1	25-06-1992
			AT 116701 T	15-01-1995
			DE 59104154 D1	16-02-1995
			DK 495160 T3	24-04-1995
			EP 0495160 A1	22-07-1992
			ES 2069173 T3	01-05-1995
US 5390881	A	21-02-1995	AT 180849 T	15-06-1999
			AU 4569793 A	14-02-1994
			DE 59309632 D1	08-07-1999
			WO 9402682 A1	03-02-1994
			EP 0652996 A1	17-05-1995
			EP 0674050 A1	27-09-1995
			EP 0964100 A2	15-12-1999
			FI 950219 A	19-01-1995
			GR 3035872 T3	31-08-2001
			NO 950225 A	20-01-1995
			PL 307228 A1	15-05-1995
EP 0922807	A	16-06-1999	IT VR970117 A1	10-06-1999
			AT 213797 T	15-03-2002
			DE 69803972 D1	04-04-2002
			DE 69803972 T2	14-11-2002
			DK 922807 T3	10-06-2002
			EP 0922807 A1	16-06-1999
			ES 2173562 T3	16-10-2002
			PT 922807 T	30-08-2002
US 4105175	A	08-08-1978	LU 75283 A1	08-02-1978
			BE 856073 A1	27-12-1977
			CH 615968 A5	29-02-1980
			DE 2729692 A1	05-01-1978
			FR 2356766 A1	27-01-1978
			GB 1568878 A	11-06-1980
			IT 1080661 B	16-05-1985
			NL 7707206 A ,C	03-01-1978